

Service Information System

Welcome: t010txr

Product: NO EQUIPMENT SELECTED
Model: NO EQUIPMENT SELECTED
Configuration: NO EQUIPMENT SELECTED

Systems Operation

814K, 816K, 826K 836K Landfill Compactors, 815K, 825K, Soil Compactors, 824K, 834K, 844K, 854K Wheel Dozers and 986K, 988K, 990K, 992K,994K Wheel Loaders Information Display Publication Date -01/09/2015 Date Updated -31/08/2018

i06731341

Menu Navigation

SMCS - 7490

Performance Pages

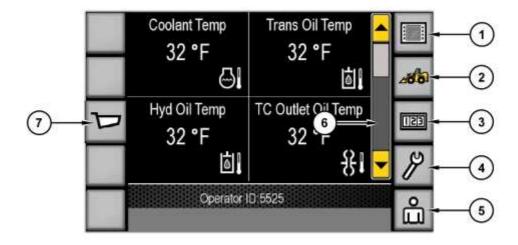


Illustration 1 g03886686

- (1) Display button
- (2) Machine button
- (3) Totals button
- (4) Service button
- (5) Operator button
- (6) Interactive Scroll Bar
- (7) Payload button (Note: Payload is available only in 988, 990, and 994 LWL with CPM Installed.)

The main Performance Page of the Large Wheel Loader consists of four quadrants. Scroll through the Performance Page and to the Work Monitor page by pressing the yellow UP Arrow button or the yellow DOWN Arrow button on either end of the Interactive Scroll Bar (6).

Intelligent Compaction

Model 815K or 825K with Compaction System installed.

Intelligent Compaction improves productivity on a work site and is also a functional documentation tool for operators and site managers.

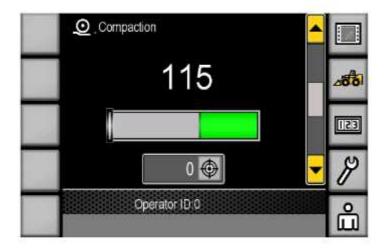


Illustration 2 g03682073

Machine Drive Power (MDP)

Machine Drive Power (MDP) enables the operator to determine the amount of compaction necessary for the job.

As the operator compacts the material, the MDP number changes as the machine moves over the material. The MDP is a number between 0 and 150. A value of zero represents a material that has never been compacted and is very soft. A value of 150 represents a material that is very hard and compact, or similar to concrete.

The displayed MDP value changes as the soil is compacted, allowing the operator to compact until an intended level is achieved. Any values outside of this range (including negative or decimal values) are unacceptable, and will default to the last known target value. The default target value for the first entry is 85. When the machine is in transition, the MDP number should hold the last known value.

Select a Target Compaction Value

The Intelligent Compaction feature allows the operator to select a Target Value of Compaction. The illustrative process appears below.

- 1. Compact a test area or "Test Zone".
- 2. Measure the compacted area.

Note: If applicable, the operator gains approval for the level of compaction for the area.

- 3. Set the "Target Compaction Value". This number becomes the Target Value for the entire work site.
- 4. Compact the desired area work site to the Target Value.

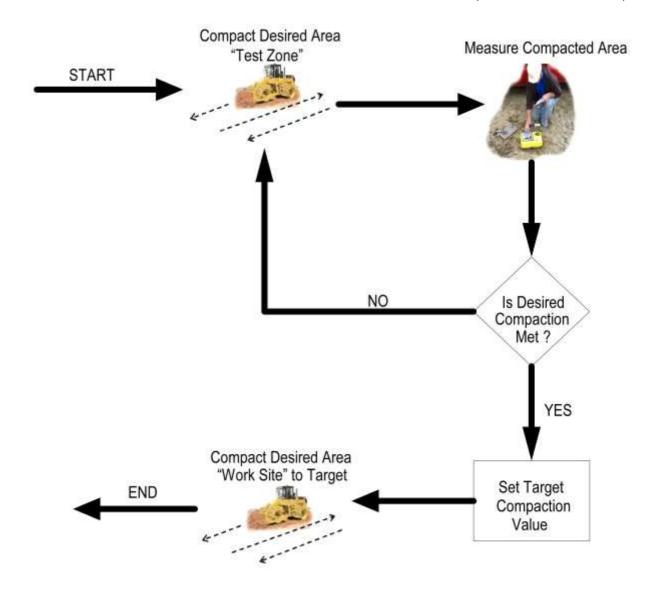


Illustration 3 g03682091

Set a Target Compaction Value

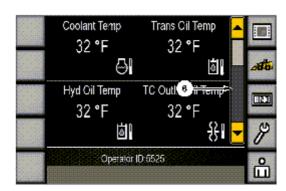


Illustration 4 g03886702

(6) Interactive Scroll Bar

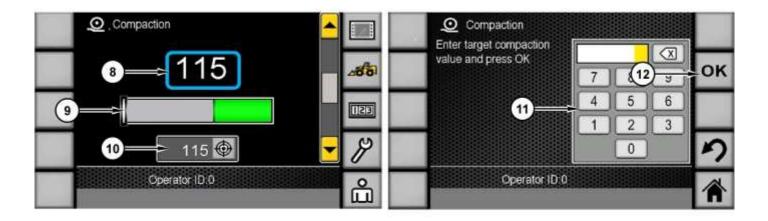


Illustration 5 g03886710

- (8) Compaction Target Value
- (9) Intelligent Compaction Slider Bar
- (10) Target Value Box with TARGET button
- (11) Compaction page with Keypad
- (12) OK button

After the operator determines a Compaction Target Value, the numbers are entered on a keypad on the "Compaction" page (11). The Compaction Target Value (8) and an "Intelligent Compaction Slider Bar" (9) will appear on the Compaction page.

- 1. Scroll to the Compaction page by pressing the DOWN Arrow button of the scroll bar that is located on the right side of the Display. The Compaction settings page will appear.
- 2. On the Compaction page, press the "Target" button located in the Target Value box (10). A Compaction page will appear with a keypad (11).
- 3. Press the keypad numbers to enter a "Target Compaction Value".
- 4. Press "OK" to set the number. The "Actual Compaction Value" will appear with the Intelligent Compaction Slider Bar (9).
- 5. Press the OK button (12) to set that number. The "Actual Compaction Value" will appear with the "Intelligent Compaction Slider Bar".

Note: The Intelligent Compaction Slider Bar shows the Actual Compaction Value compared to the Target Value Range.

Intelligent Compaction Slider Bar

The Compaction page will show a two-colored Intelligent Compaction Bar with a slider (see Illustration 6). The bar represents the Target Compaction Value as a range of the operator-entered Targeted Compaction Value. The slider allows the operator to see (in real time) the Actual Compaction Value compared to the Target Value range.

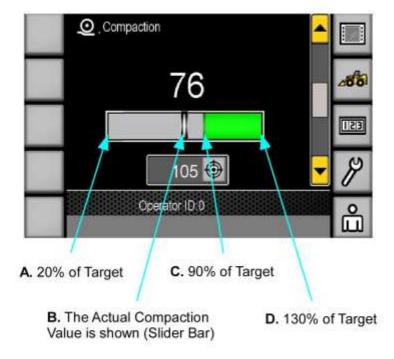


Illustration 6 g03893860

For example, if the target is 85:

- A: The lower limit is 17 (20% of target).
- B: The Actual Compaction Value is 76.
- C: The break between gray and green on the bar is 76.5 (90% of target).
- D: The upper limit is 110.5 (130% of target).

The Actual Value is displayed as the slider bar moves along the bar and as the Actual Compaction Value changes. The Actual value will be normalized based on the Target Value. This is done so that the Display's bar will always have the same range and will not change its limits. The slider bar (width) will have range of +/- 5 of the Actual Compaction Value.

Intelligent Compaction: Failure Mode Functionality



Illustration 7 g03682188

The Machine Drive Power (MDP) algorithm requires an acceptable working level of certain machine parameters to convey an accurate MDP value. Examples of unacceptable conditions would include:

- The blade is not engaging the material.
- The machine is not turning.
- The machine has not stopped.
- The machine is not on a grade greater than 6 degrees.
- The machine is not in third gear.
- The machine throttle is not less than 90%.

If any of the inputs to the MDP fail, the MDP will display "***" (three asterisks).

Work Monitor



Illustration 8 g03887699

(6) Interactive Scroll Bar

The Work Monitor Page provides useful machine information such as fuel level and consumption. Production, Cycles, and Average Fuel Rate also appear on Models 988, 990, and 994.

To access the Work Monitor, press the UP or DOWN arrow button on either end of the Interactive Scroll Bar (6).

Left Side Buttons

Payload

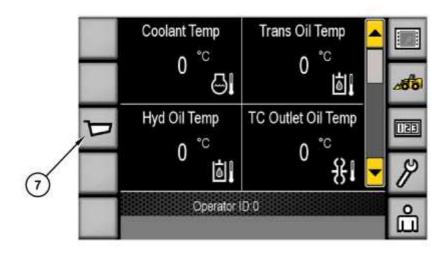


Illustration 9 g03887711

To access the Payload Page, press the Payload Button (7) on the Main Performance Page. (7) Payload Button

Models 988, 990, and 994 when Cat® is installed and enabled.

Note: For more information on the Payload Control System, refer to Systems Operation/Testing and Adjusting, UENR6737, "988K and 990K Wheel Loaders Cat[®] Production Measurement Application".

Rear View Camera

If installed, the Rear View Camera allows the operator to use the Information Display to view current activity behind the machine.

To enhance the safety around the machine, the Information Display will provide a visual and audible indication when radar detects an object.

Note: The Cat[®] Object Detection System does not have to be installed.

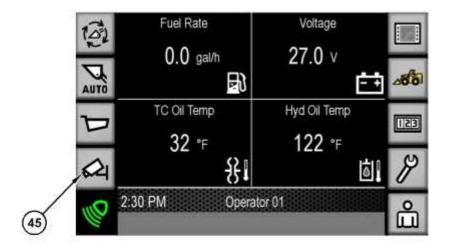


Illustration 10 g06217697

(45) Rear View Camera button

1. To access the Rear View Camera settings, press the Camera hotkey button (45) located on the left side of the Information Display.



Illustration 11 g06217701

(46) Payload banner

Note: The Payload Banner (46) will show if the Cat Production Measurement is installed.

Note: The clock will not appear in the Information Banner if the Payload banner is visible.

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